dominant cause of AKI is described in Figure 1. Among the 5 patients with acute tubulointerstitial nephritis, 4 were biopsy-proven, and 1 was presumed based on the clinical history of recent NSAID use.

Renal biopsies were performed in six patients, and histopathological diagnoses were pigment cast nephropathy (n=1), acute tubulointerstitial nephritis (n=4), and infection-related GN (n=1). Among the four patients with acute tubulointerstitial nephritis, two had exposures to NSAIDs and native medications, while a clear aetiology could not be identified in the other two. One patient, in addition, had the incidental finding of extramedullary haemopoiesis in the kidney, which was secondary to HIV-related bone marrow fibrosis.

The overall mortality rate was 41.4% (5 patients died during hospitalisation, 7 patients died during follow-up). Seven patients remained dialysis-dependent at the time of discharge/death.

Conclusions: While we identified a very vast spectrum of AKI, overwhelmingly the most common cause in our hospital population remains sepsis. A significant proportion required renal replacement therapy, and the patients in our cohort suffered a high mortality rate. Limitations include observational study design, referral bias, and small sample size.

No conflict of interest

POS-199
STREPTOCOCCUS PNEUMONIAE-ASSOCIATED HEMOLYTIC UREMIC SYNDROME IN CANADIAN CHILDREN WITH INVASIVE PNEUMOCOCCAL DISEASE: FROM IMPACT NATIONAL SURVEILLANCE NETWORK

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Introduction: Hemolytic uremic syndrome (HUS) is typically a complication of enterocolitis from Shiga toxin-producing Escherichia coli. Strepptococcus pneumoniae-associated HUS (SP-HUS) is less frequent, accounting for ~5% of HUS cases in children. It is most associated with invasive pneumococcal disease (IPD) that presents with pneumonia. Pediatric SP-HUS mortality has been reported as 3-12%. This study aimed to describe the epidemiology of pediatric SP-HUS in Canada by conducting a secondary analysis of the national pediatric IPD surveillance data from 1991-2019.

Methods: The Canadian Immunization Monitoring Program, Active (IMPACT) is a national, sentinel surveillance network for vaccine-preventable diseases. The surveillance network involves 12 pediatric hospitals across Canada, representing ~90% of tertiary care pediatric beds nationally. All IMPACT IPD cases were analyzed to identify cases with newly diagnosed HUS. The SP-HUS cases were compared to non-HUS IPD cases in demographics and patient care information, using Wilcoxon signed rank test and chi squared test.

Results: Thirty children with SP-HUS were identified amongst 6,757 IPD cases, representing 0.4% of IPD cases. 16/30 (51%) of SP-HUS patients had no underlying health conditions and 9/30 (30%) had at least one relevant concurrent acute infection, where 8/9 (89%) were respiratory in nature. The most common IPD clinical presentations were pneumonia (23/30, 77%) and most (22/23, 96%) had pneumonia complicated by empyema or pleural effusion. Comparing SP-HUS with non-HUS IPD cases, SP-HUS had an older median admission age of 28 months (interquartile range [IQR] 16-40 mo.), compared to 22 months (IQR 11-53 mo.) for non-HUS (p=.6785). There was no significant difference seen in sex, with male SP-HUS patients making up 63.3% and males making up 57.6% of non-HUS (p=.5284). Significantly more SP-HUS (30/30) required hospital admission compared to non-HUS IPD (5077/6715, 76%, p<.0001). SP-HUS had significantly longer median hospital stay (29 days, IQR 21-38 d) compared to non-HUS IPD cases (7 days, IQR 3-12 d, p<.0001). Significantly more SP-HUS cases required ICU admission (28/30, 93% SP-HUS vs. 1221/6715, 18% non-HUS, p<.0001). SP-HUS had significantly longer median ICU stay (10 days, IQR 1-28 d) compared to non-HUS IPD cases (3 days, IQR 2-7 d, p<.0001). All 30 SP-HUS patients survived while 163/6727 (2.4%) of non-HUS IPD died of the IPD infection or related sequelae (p=.3881).

Conclusions: The most common IPD clinical presentation was pneumonia complicated by empyema or pleural effusion. No significant difference was seen between SP-HUS and non-HUS IPD patients in demographics or survival. However, significant differences were seen in the proportion and duration of admissions in hospital and ICU. It is also noteworthy that all 30 SP-HUS patients survived, while other studies have yielded mortality of 3-12%. Further research could examine how SP-HUS care management differs across geographical regions to yield different patient outcomes. Future research could also examine the incidence and duration of dialysis for SP-HUS patients, incidence of renal morbidity at discharge, and the prevalence of renal transplant with follow-up.

No conflict of interest

POS-200
SARCOID TUBULO-INTERSTITIAL NEPHRITIS: A REVIEW OF SIX CASES AT ONE CENTER

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Introduction: Sarcoidosis is an idiopathic multisystem granulomatous disease of uncertain cause. It mostly affects lungs and lymph nodes. Renal involvement in sarcoidosis is rare. The incidence of sarcoidosis is usually due to abnormal calcium balance or parenchymal involvement, which may ultimately cause renal dysfunction. The aim of our study was to analyze the epidemiological, clinical, paraclinical, therapeutic features, and the outcome of sarcoidosis in patients with renal manifestations.

Methods: We carried a descriptive retrospective study including 6 patients with sarcoidosis hospitalized in the nephrology department of Rabta Hospital of Tunis between January 2012 and December 2018. Renal biopsy was performed for all patients.

Results: Our series involved 5 women and one man with a mean age of 41.6 years. One patient had a history of nephrolithiasis. Renal impairment revealed the diagnosis of sarcoidosis in five cases while it happened later in the course of the disease in the other case. All patients presented with renal failure on admission with a median creatinine serum level of 39 mg/dL and a mean estimated glomerular filtration rate (eGFR) of 26.2 ml/min. Laboratory tests showed normal calcium levels in five cases with an average of 9.23 mg/L. One patient had hypercalcemia. Hypecalciuria was noted in one case. All patients had low proteinuria with an average of 1.17 g/24h and no patient had hematuria. The angiotensin-converting enzyme was measured in 3 cases and it was normal. Nephrotic-renal manifestations were: a pulmonary interstitial syndrome in 4 cases, anterior granulomatous uveitis in 2 cases, cutaneous lesions in 2 cases, cardiac sarcoidosis in one case, neurosarcoidosis in one case, hepatic sarcoidosis in one case, parotid gland sarcoidosis in one case and polyarthritides in one case. When performing kidney biopsy, granulomatous interstitial nephritis was seen in five patients while the other patient had crystal nephropathy associated to interstitial nephritis without granuloma. All patients initially received oral prednisolone 1 mg/kg/day with subsequent tapering to the dose of 5 mg per day. One patient was treated with inhaled corticosteroids for diffuse parenchymal lung involvement and two patients were put on immunosuppressive therapy (Azathioprine). No patient required dialysis. The mean follow-up of 37 months, the outcome was marked by the improvement of serum creatinine to a mean level of 9.8 mg/L in 4 patients, in whom one patient showed a new recurrence of renal sarcoidosis. Two patients reached end-stage renal disease.

Conclusions: Renal involvement is rare in sarcoidosis and it is probably underestimated. Early diagnosis with appropriate treatment must be set early in order to prevent progression to chronic renal failure.

No conflict of interest

POS-201
INFECTIOUS COLITIS DEVELOPING IN TWO PATIENTS NEWLY DIAGNOSED WITH MULTIPLE MYELOMA

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Renal biopsy revealed the diagnosis of sarcoidosis in 6 patients with renal manifestations. Future research could also examine the incidence and duration of dialysis for SP-HUS patients, incidence of renal morbidity at discharge, and the prevalence of renal transplant with follow-up.

No conflict of interest